Remarks

Claims 1-30 are pending in the above-referenced patent application. Claims 1, 14, 29 and 30 are independent claims.

Applicant amended claims 1, 14, 29 and 30 to more particularly and distinctly claim the invention.

In a prior office action, the examiner continues to use Khan and Appelt to reject claims 1, 7-12, 14 and 25-30 as having been obvious.

Obviousness

"It is well established that the burden is on the PTO to establish a prima facie showing of obviousness, *In re Fritsch*, 972 F.2d. 1260, 23 U.S.P.Q.2d 1780 (C.C.P.A., 1972)."

"It is well established that there must be some logical reason apparent from the evidence or record to justify combination or modification of references. *In re Regal*, 526 F.2d 1399 188, U.S.P.Q.2d 136 (C.C.P.A. 1975). In addition, even if all of the elements of claims are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill in the art would have been prompted to combine the teachings of the references to arrive at the claimed invention. Id. Even if the cited references show the various elements suggested by the Examiner in order to support a conclusion that it would have been obvious to combine the cited references, the references must either expressly or impliedly suggest the claimed combination or the Examiner must present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention obvious in light of the teachings of the references. *Ex Parte Clapp*, 227 U.S.P.Q.2d 972, 973 (Board. Pat. App. & Inf. 1985)."

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under

Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

Discussion

Claims 1, 14, 29 and 30 recite "outputting a prose rendition of the query text, the prose rendition representing ordinary speech or writing without metrical structure," or similar language. As applicant has pointed out in a prior response, at least this quoted claim feature is totally absent from the cited references.

The examiner admits that Khan fails to disclose this quoted claim feature and continues to look to Appelt to provide for this deficiency.

In the office action dated June 16, 2005, the examiner argues:

> **Appelt teaches outputting a prose rendition of the query text at col. 3, lines 8-17 and at col. 12, lines 23-35.**

Applicant has reproduced the sections of Appelt argued by the examiner:

> **I (Appelt, col. 3, lines 8-17)**
> **The grammar can comprise pattern-action rules, or it can comprise one or more rules to specify a proper noun, a complex word, a phrase, as well as a domain event. The grammar can also comprise one or more rules for merging partial information from different parts of a document. The index for the text corpus can be searched using natural language querying. The natural language querying can be based on a query grammar. The query grammar can be associated with a topic. The query grammar can be represented as pattern-action rules.**
>
> **II (Appelt, col. 12, lines 23-35)**
> **FIG. 9 illustrates a process 510 for training the natural language user interface 110 of FIG. 1. The process 510 is a variant of the process 200 of FIG. 2, except that the process 510 is specific to various natural language queries that a user may enter. The process 510 produces a set of rules which identify in advance various natural language queries that users are likely to use. The rules are distilled in one or more query grammar files, which are invoked in response to a query. The grammar**
> **files are used to generate one or more database queries, which are submitted to a query database (not shown). The query database in turn generates one or more search parameters which are submitted to the information extraction engine 108 (FIG. 1).**

No where, either in the above language, or anywhere in the cited reference, does Appelt teach or suggest outputting a prose rendition of the query, the prose rendition representing ordinary speech or writing without metrical structure.

First, Appelt fails to teach, suggest or even mention the term "prose." As one skilled in this art knows, prose refers to ordinary speech or writing, without metrical structure.

Second, Appelt fails to teach, suggest or even mention "outputting a prose rendition of the query text."

The examiner argues that this feature is shown in Appelt at col. 3, lines 8-17. However, the examiner's fails to recognize that the above lines expand on content at Appelt, col. 2, lines 60-67, to col. 3, lines 1-7 (reproduced below for the convenience of the examiner):

> **In another aspect, a system for providing information in response to a natural language query includes an information extraction engine adapted to index an automatically updated text corpus based on a predefined grammar; a database coupled to the information extraction engine to store the index output; and a natural language query engine coupled to the database to search the index in response to the natural language query.**
>
> **Implementations of the above aspect include one or more of the following. A data acquisition unit can be coupled to the information extraction engine to automatically update the text corpus. The data acquisition unit can receive data from any of the following in any combination: a web crawler, a news service, or a search engine, for example. The grammar can be based on events and relationships associated with a topic.**

Appelt is all about an index. Appelt uses an information extraction engine to index text based on a grammar - no outputting a prose rendition of the query text. Appelt couples a database and information extraction engine to store the index in the database - no outputting a prose rendition of the query text. Appelt uses a natural language query engine to search the index in the database in response to a natural language query - no outputting a prose rendition of the query text.

Appelt teaches:

> **FIG. 6 illustrates a process 450 for formatting an answer to a query. The process 450 generates a citation to the original article (step 452). The citation may be in the form of a hyperlink. Additionally, the process 450 highlights one or more relevant portions in the original article (step 454). The process 450 then generates a summary of the original document in the summary section (step 456). Finally, a natural language summary of results found in response to the search is generated (step 458). In this manner, the system succinctly answers the user's query, and links are provided to allow the user to view the entire source document, if desired. (Appelt, col. 11, lines 38-49)**

Thus, Appelt formats results to a query by generating citations, or highlighting relevant portions of an article. This is very different from outputting a prose rendition of the query text. The prose rendition is of the query text itself, not the answers or results to the query.

As one skilled in this art knows, an exemplary query process begins with a query (step 1), then a search for possible matches of the query (step 2), and finally an output of the results (step 3). Applicant's claimed feature outputs a prose rendition of the text query (the text query received as input in step 1).

This is more explicit when viewed in conjunction with Appelt's FIG. 7 and FIG. 8:

> **The output of the process 450 is illustrated by an example, shown in more detail in FIGS. 7-8. As illustrated in FIGS. 7-8, a user looking for information relevant to the topic of joint ventures can pose a natural language question, (e.g., "Tell me about joint ventures involving SBC in the Communications Services sector") in a text input box 500. The query is analyzed and a query is submitted to the database 109 in the information extraction engine 108 (FIG. 1).**
>
> **The distilled result is provided to an output box 502. First, a short summary box 504 is shown illustrating a particular group of search results, in this case a group of documents (shown with one document) involving Telefono de Mexico S.A. de C.V. and SBC. (Appelt, col. 11, line 50-62)**

Here, a natural language query, i.e., "(t)ell me about joint ventures involving SBC in the Communications Services sector," is received, analyzed and used to search a database. This is very different from outputting a prose rendition of the query text. Appelt fails to teach or suggest this feature and one skilled in this art would not be lead to Appelt, because Appelt merely deals with maintaining an index, analyzing an input, at times, with the aid of grammar rules, and formatting results.

The examiner implies that natural language processing based on a grammar and associated with a topic is analogous to outputting prose. Here again, the examiner's argument is misplaced. Appelt teaches that an index for the text corpus can be searched using natural language querying. (Appelt, col. 3, lines 13-14) The examiner fails to recognize that this natural language querying is specific to step 2 of the exemplary query process described above, that is, it is specific to a search for possible matches of the query in conjunction with an index. This Appelt natural language querying is totally transparent in the intermediate step of the exemplary query process. No prose output is suggested and there is no motivation to output prose since natural language querying is only used during a search process of documents contained in a database to determine whether there is a match.

Accordingly, claims 1, 14, 29 and 30 cannot be rendered obvious by Khan and Appelt, whether taken separately or in combination.

All of the dependent claims are patentable for at least the same reasons as the claims on which they depend.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant asks that all claims be examined in view of the amendment to claims.

Please apply any charges or credits to deposit account 502324.

Respectfully submitted,

Date: August 24, 2005

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